Specialty Independent Review Organization

Date notice sent to all parties: 11/1/2015

IRO CASE #:

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:
The item in dispute is the prospective medical necessity of an EMG/NCS for BLE.

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:
The reviewer is a Medical Doctor who is board certified in Orthopedic Surgery.

REVIEW OUTCOME:

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

☐ Upheld (Agree)

☒ Overturned (Disagree)

☐ Partially Overturned (Agree in part/Disagree in part)

The reviewer disagrees with the previous adverse determination regarding the prospective medical necessity of an EMG/NCS for BLE.

A copy of the ODG was not provided by the Carrier or URA for this review.

PATIENT CLINICAL HISTORY [SUMMARY]:
The male is noted to be over a year post lumbar L5-S1 fusion. The injury mechanism was not provided. Diagnoses on xxxxx included lumbar sprain/strain and radicular syndrome, along with post laminectomy syndrome, radiculitis and sacroiliac dysfunction. The patient had a history of discectomy x3 also. The Attending Physician noted residual lumbar radicular pain and left leg weakness. Additional complaints related to bowel and bladder issues along with sexual dysfunction. Lower extremity weakness was bilateral 4/5 quadriceps, gastrocsoleus, right tibialis anterior and EHL, along with left TA and EHL at 3/5. Prior EMG's were + in 4/2013 (for left L5 greater than S1 radiculopathy) and negative in 4/2015. There were positive tension signs. A prior hardware block was noted to be unsuccessful. A post-operative 12/2014 dated MRI was noted to reveal post-operative changes at L5-S1, interval development of a disc protrusion at L2-3 and an unchanged right-sided L4-5 foraminal disc protrusion. There was

no reported evidence of fusion non-union. Records revealed that the EMG was to asses for active vs. inactive radiculopathy. Post-operative PT records were also reviewed. Denial letters related that radiculopathy was already evident clinically, the existence of a normal post-op. EMG and the potential lack of recent failed physical therapy.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

The patient has persistent radicular syndrome/radiculitis despite three disectomies and a fusion. There is persistent weakness of multiple motor groups in the lower extremities. Interval development of an L2-3 abnormality on MRI has been documented, in addition to abnormalities at other levels. Reasonable non-operative treatments of therapy, medications and altered activities have been tried and failed post-operatively. Due to the persistent clinical and imaging abnormalities at multiple levels (and despite a prior post-op. reportedly normal EMG); an electrical study (EMG/NCV) to assess for active vs inactive radiculopathy has met guideline criteria and is medically necessary according to the ODG.

ODG Electrodiagnostic studiesSee also Nerve conduction studies (NCS) which are not recommended for low back conditions, and EMGs (Electromyography) which are recommended as an option for low back. Electrodiagnostic studies should be performed by appropriately trained Physical Medicine and Rehabilitation or Neurology physicians. For more information and references, see the Carpal Tunnel Syndrome Chapter. Below are the Minimum Standards from that chapter.Minimum Standards for electrodiagnostic studies: The American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) recommends the following minimum standards:
(1) EDX testing should be medically indicated (i.e., to rule out radiculopathy, lumbar plexopathy, peripheral neuropathy).
(2) Testing should be performed using EDX equipment that provides assessment of all parameters of the recorded signals. Studies performed with devices designed only for “screening purposes” rather than diagnosis are not acceptable.
(3) The number of tests performed should be the minimum needed to establish an accurate diagnosis.
(4) NCSs (Nerve conduction studies) should be either (a) performed directly by a physician or (b) performed by a trained individual under the direct supervision of a physician. Direct supervision means that the physician is in close physical proximity to the EDX laboratory while testing is underway, is immediately available to provide the trained individual with assistance and direction, and is responsible for selecting the appropriate NCSs to be performed.
(5) EMGs (Electromyography - needle not surface) must be performed by a physician specially trained in electrodiagnostic medicine, as these tests are simultaneously performed and interpreted.

(6) It is appropriate for only 1 attending physician to perform or supervise all of the components of the electrodiagnostic testing (e.g., history taking, physical evaluation, supervision and/or performance of the electrodiagnostic test, and interpretation) for a given patient and for all the testing to occur on the same date of service. If both tests are done, the reporting of NCS and EMG study results should be integrated into a unifying diagnostic impression.
(7) If both tests are done, dissociation of NCS and EMG results into separate reports is inappropriate unless specifically explained by the physician. Performance and/or interpretation of NCSs separately from that of the needle EMG component of the test should clearly be the exception (e.g. when testing an acute nerve injury) rather than an established practice pattern for a given practitioner. (AANEM, 2009) Note: For low back NCS are not recommended and EMGs are recommended in some cases, so generally they would not both be covered in a report for a low back condition.
EMG-Recommended as an option (needle, not surface). EMGs (electromyography) may be useful to obtain unequivocal evidence of radiculopathy, after 1-month conservative therapy, but EMG's are not necessary if radiculopathy is already clinically obvious. (Bigos, 1999) (Ortiz-Corredor, 2003) (Haig, 2005) No correlation was found between intraoperative EMG findings and immediate postoperative pain, but intraoperative spinal cord monitoring is becoming more common and there may be benefit in surgery with major corrective anatomic intervention like fracture or scoliosis or fusion where there is significant stenosis. (Dimopoulos, 2004) EMG's may be required by the AMA Guides for an impairment rating of radiculopathy. (AMA, 2001) (Note: Needle EMG NCV- Not recommended. There is minimal justification for performing nerve conduction studies when a patient is presumed to have symptoms on the basis of radiculopathy. (Utah, 2006) This systematic review and meta-analysis demonstrate that neurological testing procedures have limited overall diagnostic accuracy in detecting disc herniation with suspected radiculopathy. (Al Nezari, 2013) In the management of spine trauma with radicular symptoms, EMG/nerve conduction studies (NCS) often have low combined sensitivity and specificity in confirming root injury, and there is limited evidence to support the use of often uncomfortable and costly EMG/NCS. (Charles, 2013) See also the Carpal Tunnel Syndrome Chapter for more details on NCS. Studies have not shown portable nerve conduction devices to be effective. EMGs (electromyography) are recommended as an option (needle, not surface) to obtain unequivocal evidence of radiculopathy, after 1-month conservative therapy, but EMG's are not necessary if radiculopathy is already clinically obvious.

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

- ☐ **ACOEM- AMERICAN COLLEGE OF OCCUPATIONAL & ENVIRONMENTAL MEDICINE UM KNOWLEDGEBASE**
- ☐ **AHCPR- AGENCY FOR HEALTHCARE RESEARCH & QUALITY GUIDELINES**
- ☐ **DWC- DIVISION OF WORKERS COMPENSATION POLICIES OR GUIDELINES**
- ☐ **EUROPEAN GUIDELINES FOR MANAGEMENT OF CHRONIC LOW BACK PAIN**
- ☐ **INTERQUAL CRITERIA**
- ☒ **MEDICAL JUDGEMENT, CLINICAL EXPERIENCE, AND EXPERTISE IN ACCORDANCE WITH ACCEPTED MEDICAL STANDARDS**
- ☐ **MERCY CENTER CONSENSUS CONFERENCE GUIDELINES**
- ☐ **MILLIMAN CARE GUIDELINES**
- ☒ **ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**
- ☐ **PRESSLEY REED, THE MEDICAL DISABILITY ADVISOR**
- ☐ **TEXAS GUIDELINES FOR CHIROPRACTIC QUALITY ASSURANCE & PRACTICE PARAMETERS**
- ☐ **TEXAS TACADA GUIDELINES**
- ☐ **TMF SCREENING CRITERIA MANUAL**
- ☐ **PEER REVIEWED NATIONALLY ACCEPTED MEDICAL LITERATURE (PROVIDE A DESCRIPTION)**
- ☐ **OTHER EVIDENCE BASED, SCIENTIFICALLY VALID, OUTCOME FOCUSED GUIDELINES (PROVIDE A DESCRIPTION)**